MAINTAINING YOUR PRIVATE WATER WELL

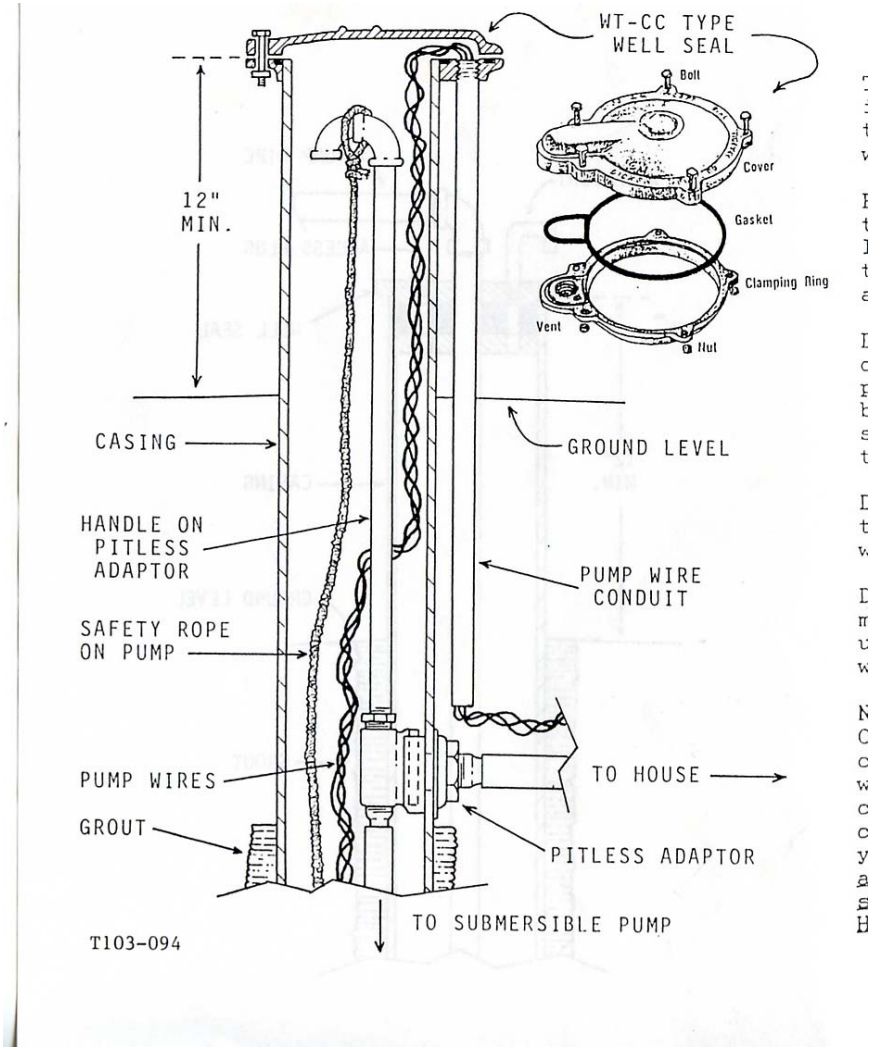
The top of the well must be at lest 12 inches above ground with drainage away from the well. DO NOT bury the well or cut the well off closer to the ground.

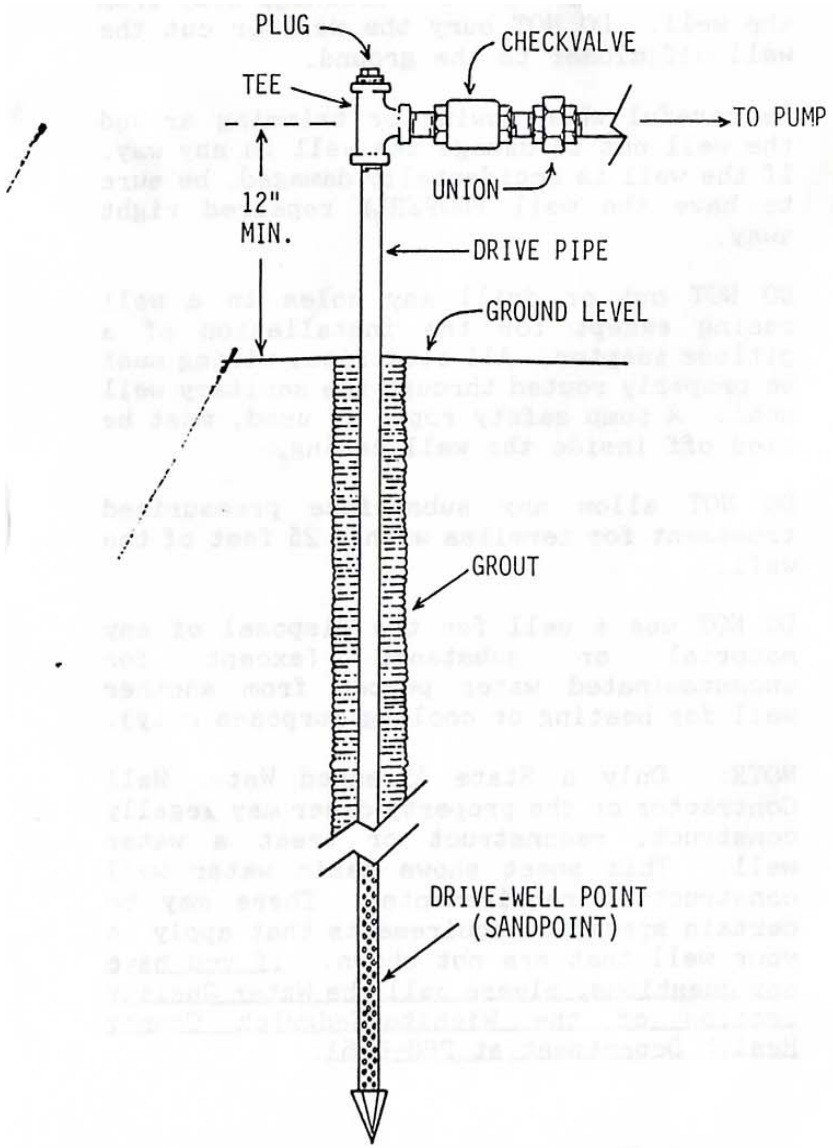
Be careful when mowing or trimming around the well not to damage the well in any way. If the well is accidentally damaged, be sure to have the well PROPERLY repaired right away.

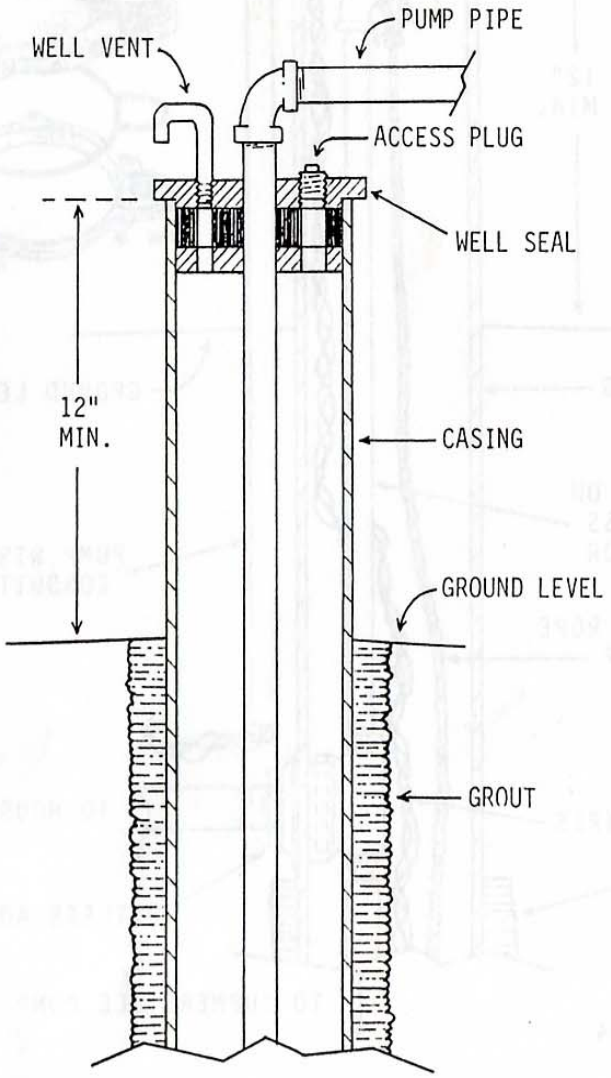
DO NOT allow any subsurface pressurized treatment for termites within 25 feet of the well.

DO NOT use a well for the disposal of any material or substance (except for uncontaminated water pumped from another well for heating or cooling purposes only).

NOTE: Only a State licensed Water Well Contractor or the property owner may legally construct, reconstruct or treat a water well. This sheet shows basic water well construction requirements. There may be certain specific requirements that apply to your well that are not shown. If you have any questions, please call the Water Quality section of the Environmental Health Department at 268-8351.




PLUG
CHECKVALVE
TEE
TO PUMP
UNION
12"
MIN.
DRIVE PIPE
GROUND LEVEL
GROUT
DRIVE-WELL POINT
(SANDPOINT)


WELL VENT
PUMP PIPE
ACCESS PLUG
WELL SEAL
12"
MIN.
CASING
GROUND LEVEL
GROUT

CITY OF WICHITA

DEPARTMENT OF ENVIRONMENTAL HEALTH
1900 E. NINTH STREET, WICHITA, KANSAS 67214
TELEPHONE (316) 268-8351 – FAX (316) 268-8390

SHOCK CHLORINATION

FOR DISINFECTION WATER SYSTEMS

Shock chlorination of the well and water supply system is recommended following well or water system construction, pump installation, or any time the well or water system is opened for maintenance, repair or modification. Shock chlorination is essential following a flood or any entrance of surface water into the well. It can also help control nuisance problems such as iron, bacteria and hydrogen sulfide (usually associated with a rotten egg or sewer smell). New construction often requires the well and system be disinfected more than once; this is usually because of the condition of the water supply system (plumbing) and not the water source. Do not use the water for human consumption until after receiving test results indication the water is bacteriologically safe. Instead use bottled water or water from a safe source.

High concentrations of chlorine used in shock chlorination may damage some water softeners, carbon filters or reverse osmosis units. Temporarily disconnect or remove any of these water treatment devices and follow manufacturer's recommendations for disinfection of them. Be careful when replacing filter cartridges not to touch them with anything that has not been disinfected, including your hands.

STEP ONE: Unseal the well and pour in an appropriate amount of disinfectant (usually one gallon of laundry bleach mixed with four gallons of water for an existing home or four gallons of bleach for new home construction). Run a garden hose to the well and circulate the water into the well for approximately fifteen minutes, then remove the hose and reseal the well.

STEP TWO: Starting with the tap or outlet closest to the well, run the cold water until you can detect the chlorine (a chlorine test kit is the best way). Once you smell a strong chlorine odor or your test is positive, turn off the cold water and run hot water until you can detect the chlorine. Then proceed to the next tap or outlet. It is very important that you get the chlorine throughout the entire water system; don't forget to flush the toilets and run water through your washing machines (clothes and dish), refrigerator ice maker, kitchen spray hose, outside taps, etcetera. If you have any line capped off so that water cannot flow through it, you must add and outlet to the end of the line or disconnect the line from the system. If you are unable to detect chlorine at a tap or outlet after running the water for a few minutes, go back to Step One and add more disinfectant. REMEMBER TO RUN BOTH HOT AND COLD WATER AT EACH OUTLET.

Once you have chlorine throughout the entire system, leave all the taps and outlets turned off for about twelve hours (overnight).

STEP THREE: Run water until all the chlorine is flushed from the system. You may wish to use the chlorine test again to verify that the chlorine is gone. If your property is connected to a septic tank-lateral system, do not flush more than about the final 100 gallons of the chlorinated

water down the drains. A strong chlorine solution may be harmful to plants or aquatic life, so try to flush most of the water through a garden hose(s) to bare ground, driveway, roadway or ditch; far removed from a stream or pond.

STEP FOUR: After you have finished flushing the system of chlorine, contact the Health Department to schedule an appointment to sample your water. To provide an accurate sample, the water can only be sampled 72 hours or more after the chlorine has been completely flushed from the system.

CHLORINE SOLUTION FOR DISINFECTION
Approximately 200 ppm (200 mg/l) concentration

Calculate the gallons of water in the well by multiplying the feet of water in the well (total well depth minus depth to water) by the gallons of water per foot of casing (Table 1). Add 100 gallons for the water in the pressure tank, water heater and pipes. Using this total, look at Table 2 to determine the amount of chlorine product to use.

TABLE 1

Casing Size (inches)	Gallons of water /foot of casing
2	0.163
5	1.02
6	1.47

TABLE 2

Chlorine Source*	% Active Chlorine	Form	Amount/100 gal Water
Laundry Bleach (Clorox, Purex, etc.)	5.25	Liquid	3pt
Swimming Pool Disinfectant Concentrated Chlorine Bleach	12-17	Liquid	1pt
High-Test Calcium Hypochlorite (HTH Pittchlor, Perchloron,etc.)	65-75	Powder	4oz
High-Test Calcium Hypochlorite (HTH Pit-Tabs, Chlorets, etc.)	65-75	Tablets	4 oz

* Be sure chlorine is the only active ingredient. Sometimes algaecides or other halogens such as iodine or bromine may be included: these should be avoided. (rev.2004) T103-092